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Subject:

ENVIRONMENTAL

**Sludge Removal Area 6 (SR-6) Technical Memorandum Addendum  
Ringwood Mines/Landfill Site, Ringwood, New Jersey**

Dear Mr. Gowers:

Date:  
August 24, 2010

ARCADIS U.S, Inc. (ARCADIS), on behalf of the Ford Motor Company (Ford), is submitting this addendum to the June 18, 2008 Technical Memorandum outlining surficial paint sludge removal activities in SR-6 at the Ringwood Mines/Landfill Site, Ringwood, New Jersey.

Contact:  
Erich Zimmerman

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**Background**

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ezimmerman@arcadis-us.com  
Our ref:  
NJ000604.0035

Surficial paint sludge was observed along and below the ridge located north of the Cannon Mine Pit area, within the southern portion of the Ringwood Site. This area was designated as SR-6, and removal activities were conducted from approximately October 2007 through April 2008. Approximately 10,000 cubic yards of paint sludge and soil were removed from the area and disposed off-site.

**Confirmatory Sampling**

Side wall post-excavation samples were collected for VOCs, SVOCs, Metals, and PCBs at a frequency of approximately one (1) sample for every 30 linear feet of excavation side wall (outside the area of exposed bedrock). Post-excavation bottom samples were collected for the same parameters at a frequency of approximately one (1) sample for every 900 square feet of excavation bottom area (outside the area of exposed bedrock). Post-excavation sample locations were biased to locations and intervals expected to have the highest potential for impact based on field observations. A total of twenty-three (23) side wall and sixty-nine (69) bottom samples were collected. Results of this sampling were provided to the USEPA and NJDEP in a Technical Memorandum dated June 18, 2008.

Imagine the result

As indicated in the June 18, 2008 memorandum, Arochlor 1254 was detected at one side wall sample location collected on April 21, 2008 (PE-30S) at a concentration of 0.75 mg/kg, which slightly exceeded the NJDEP residential soil contact standard (SCS) of 0.49 mg/kg. No other post-excavation samples contained constituents at concentrations greater than the NJDEP SCS. ARCADIS therefore requested approval from the USEPA to seed and stabilize the SR-6 to minimize runoff and erosion from this area while subsequent removal and sampling was conducted in the location of sample. The USEPA granted this request.

ARCADIS excavated additional soil from the impacted side wall at PE-30S, and collected a supplemental post-excavation sample on July 30, 2008 to confirm that removal efforts were complete in this area. Arochlor 1254 was not detected in this sample. The location of this sample is provided on Figure 1, attached. Results of all post-excavation sampling conducted within SR-6 are summarized within Table 1, attached.

#### Conclusions

Results of post-excavation samples obtained within SR-6 indicated that only one of the ninety-two (92) post-excavation samples contained any constituents at concentrations greater than the NJDEP SCS. This sample (PE-30S) was located at the northern edge of the removal area. Additional removal work was conducted, and a second post-excavation sample collected at PE-30S on July 30, 2008 confirmed that delineation of SR-6 was complete. ARCADIS therefore requests approval to complete restoration activities within SR-6, and perform wetland mitigation where appropriate in this area.

Please feel free to contact me if you have any questions or require additional information.

Sincerely,  
ARCADIS US, Inc



Erich Zimmerman, PE  
Project Manager

Copies:  
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